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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,462	03/11/2004	Brian R. Samuels	29214/40015	6413
4743 7590 03/13/2008 MARSHALL, GERSTEIN & BORUN LLP 233 S. WACKER DRIVE, SUITE 6300 SEARS TOWER CHICAGO, IL 60606			EXAMINER PATTERSON, MARC A	
			ART UNIT	PAPER NUMBER
			1794	
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			03/13/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/798,462

**Applicant(s)**

SAMUELS, BRIAN R.

**Examiner**

MARC A. PATTERSON

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 6, 7, 12-17, 43, 45 and 47-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 7, 12-17, 43, 45 and 47-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

**NEW REJECTIONS**

***Claim Rejections – 35 USC § 102(b)***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 42 - 44 and 46 - 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Beckwith et al (WO 97/36798).

With regard to Claim 42, Beckwith et al disclose a film having a liquid absorbed therein (a solution of a modifier, therefore a liquid, is sorbed into a film; page 15, lines 2 - 12), the surface of the film having a surface energy, therefore a dyne level, of at least 50 dynes (page 13, line 4); the liquid is absorbed into a layer comprising polyamide which is a ether / amide block copolymer (page 10, lines 27 - 30 and page 11, lines 7 - 12); the amide polymer is nylon 12 (page 11, lines 7 - 12), therefore an aliphatic primary diamine, therefore formed of nylon consisting of aliphatic primary diamine and aliphatic dicarboxylic acid; the liquid is applied to the surface of the film (the film is immersed in a bath of modifier; page 14, lines 22 - 25) and prior to the application of the liquid the surface has been surface activated (corona treatment, therefore corona discharge; page 13, lines 16 - 21). However, the claimed aspects of the film being surface activated prior to the application, and of the liquid application, and of the amount of liquid being able to be absorbed by the film being higher than before the surface treatment, are given little patentable weight as the limitations are directed to process limitations.

With regard to Claims 43 - 44, the film disclosed by Beckwith et al also comprises a polyvinylpyrrolidone (page 12, line 11) and is crosslinked (page 11, line 17).

With regard to Claim 46, the film disclosed by Beckwith et al can include any desired amount of polyvinylpyrrolidone (page 12, line 5), therefore 16% by weight.

With regard to Claims 47 - 48, Beckwith et al disclose a third outer layer comprising nylon 66 (page 18, line 25).

With regard to Claim 49, Beckwith et al disclose absorption by segments of the copolymer (page 8, lines 16 - 20); Beckwith et al therefore disclose absorption through the entire thickness of the nylon

With regard to Claim 50, the film disclosed by Beckwith et al has a thickness of 5 micron (page 11, line 24).

***Claim Rejections – 35 USC § 103(a)***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 - 3, 6 - 7, 9, 12 - 15 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erk et al (U.S. Patent No. 4,560,520) in view of Shimizu (U.S. Patent No. 6,352,762 B1).

With regard to Claims 1 - 3, 9, 13 and 55, Erk et al disclose a nylon film having a liquid absorbed therein (polyamide; column 5, lines 6 - 12) for packaging food (column 1, lines 8 - 10);

Art Unit: 1794

the film has polyhexamethylenedipamide (column 4, line 67) and Erk et al does not disclose other components; a film consisting of aliphatic primary diamine and aliphatic dicarboxylic acid is therefore disclosed by Erk et al. The claimed aspects of the film being surface activated prior to the application, and of the liquid application, and of the amount of liquid being able to be absorbed by the film being higher than before the surface treatment, are given little patentable weight as the limitations are directed to process limitations. Erk et al fail to disclose a dyne level of at least 50 dynes. Shimizu et al teach a polyamide film having a dyne level of at least 50 dynes for the purpose of obtaining a film that is printable (column 3, lines 23 - 31). One of ordinary skill in the art would therefore have recognized the advantage of providing for the dyne level of Shimizu et al in Erk et al, which comprises a polyamide film, depending on the desired printability of the end product. It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for a dyne level of at least 50 dynes in Erk et al in order to obtain a film that is printable as taught by Shimizu et al.

With regard to Claim 6, Erk et al fail to disclose a liquid that is applied in amount of between 0.4 to 10 mg/cm<sup>2</sup>. However, Erk et al disclose a liquid that is applied in amount which provides absorbed, as discussed above. Therefore, one of ordinary skill in the art would have recognized the utility of varying the amount of the liquid applied to obtain the desired amount of liquid absorbed. Therefore, the amount of liquid absorbed would be readily determined by through routine optimization of the amount of the liquid applied by one having ordinary skill in the art depending on the desired use of the end product as taught by Beckwith et al. It therefore would be obvious for one of ordinary skill in the art to vary the amount of the liquid applied in order to obtain the desired amount of liquid absorbed, since the amount of liquid absorbed would

Art Unit: 1794

be readily determined through routine optimization by one having ordinary skill in the art depending on the desired end result as shown by Erk et al.

With regard to Claim 7, the film disclosed by Erk et al is a food packaging film, as discussed above, therefore having a food contact surface.

With regard to Claim 12, the film disclosed by Erk et al is in the form of a tubular casing (column 3, line 28).

With regard to Claims 14 - 15 and 17, the liquid disclosed by Erk et al comprises a composition comprising an additive for transfer to a food product comprising a flavoring agent (smoke; column 1, lines 22 - 26) the liquid therefore comprises an anti - viral agent as it induces eating, and therefore destruction of the food product and thus prevents the infection of the food product with viruses.

5. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Erk et al (U.S. Patent No. 4,560,520) in view of Shimizu (U.S. Patent No. 6,352,762 B 1) and further in view of Luthra et al (European Patent No. 0986957).

Erk et al and Shimizu et al disclose film for a food casing comprising a modifier, therefore an additive, as stated above. Erk et al and Shimizu et al fail to disclose an additive that comprises a Maillard reagent. Luthra et al teach a film (paragraph 0001) having an additive that comprises a Maillard reagent (sugar; paragraph 0042) for a food casing (packaging for meat products; paragraph 0002) for the purpose of obtaining a food casing that provides transfer of flavor from the film (paragraph 0001). One of ordinary skill in the art would therefore have recognized the advantage of providing for the additive of Luthra et al in Erk et al and Shimizu et

Art Unit: 1794

al, which comprises film for a food casing, depending on the desired transfer of flavor of the end product. It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for an additive that comprises a Maillard reagent in Erk et al and Shimizu et al in order to obtain transfer of flavor from the film as taught by Luthra et al.

6. Claims 45 and 51 - 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Beckwith et al (WO 97/36798).

Beckwith et al disclose a film as discussed above. With regard to Claim 45, Beckwith et al fail to disclose a nylon comprising nylon 6. However, Beckwith discloses a nylon, as stated above, and teaches the use of nylon 6 as a nylon for use in the film (page 18, line 20) and Beckwith teaches blending of nylon with the film (page 12, lines 5 - 6). It would therefore have been obvious for one of ordinary skill in the art to have provided for nylon 6 as the nylon of Beckwith et al teaches the use of nylon 6 for use in the film.

With regard to Claims 51 - 54, Beckwith et al fail to disclose a surface activation such that the surface has a watt density of at least  $500 \text{ w-min/m}^2$ . However, Beckwith et al disclose an amount of surface activation selected to provide a desired adhesion with a food product (page 13, lines 1 - 6). It therefore would have been obvious for one of ordinary skill in the art, through routine optimization, to have provided for sufficient surface activation to provide the desired adhesion.

ANSWERS TO APPLICANT'S ARGUMENTS

7. Applicant's arguments regarding the rejections of the previous Action have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 10 of the remarks dated February 4, 2008, that the claimed nylon film differs from the nylon film of WO 97/36798 in that the claimed nylon is not a block copolymer.

However, a nylon that is a block copolymer is not excluded by the claimed invention. Applicant also argues, on page 11, that the nylon of the claimed invention has liquid absorbed and is permanently modified.

However, WO 97/36798 has liquid absorbed; furthermore, a film that is permanently modified is not claimed.

Applicant also argues, on page 14, that the liquid disclosed in WO 9736798 is absorbed only in portions of the polymer that do not comprise nylon .

However, as stated above, a nylon that is a block copolymer is not excluded by the claimed invention; furthermore, the liquid disclosed is at least partially absorbed in a nylon copolymer and is therefore absorbed in a nylon.

Applicant also argues, on page 15, that the claim limitation of a film that absorbs more liquid than a film that has not been surface activated should be given patentable weight although it is functional language; functional language, Applicant argues, is well – known to be permissible in claims.

However, Applicant has not stated why the claim limitation is a structural limitation, and should therefore be given little patentable weight.

Applicant also argues, on page 16, that WO 97/36798 fails to teach modification of the physical properties of the water – insoluble segment.

However, as stated above, the liquid disclosed is at least partially absorbed in a nylon copolymer and is therefore absorbed in a nylon.

Applicant also argues, on page 17, that the films exemplified in WO 97/36798 are not corona treated.

However, WO 97/36798 is not limited to the exemplified films.

Applicant also argues, on page 18, that WO 97/36798 does not disclose absorption through the entire thickness of the nylon, because the water insoluble segments do not absorb water.

However, it is unclear why water would not be absorbed through the thickness of the other segments of the nylon.

Applicant also argues that the nylon disclosed by WO 97/36798 does not consist only of amide units, as stated in the previous Action.

However, it is unclear where, in the previous Action, it is stated that the nylon disclosed by WO 97/36798 consists only of amide units.

Applicant also argues, on page 19, that Applicant has previously quoted the teaching of WO 97/36798 that a polyamide should have a surface energy of not more than 45 dynes.

However, the location of the quote is not clear.

Applicant also argues, on page 21, that WO 97/36798 states that absorption of water decreases the integrity of a polymer, because WO97/36798 states that water insoluble segments of the copolymer prevent the food contact layer from being solubilized and the water insoluble

Art Unit: 1794

segments serve to anchor the hygroscopic portions to the rest of the copolymer and thereby maintain the integrity of the food contact layer during cook in.

However, this statement does not include an explicit statement regarding polymer integrity.

Applicant also argues that the statement that an ingredient that induces eating is an antiviral is incorrect; sugar induces eating and is not an antiviral, Applicant argues, and does not actively protect against microbial infection.

However, most foods contain sugar, and also provide actively against microbial infection; furthermore, active protection is not claimed.

Applicant also argues, on page 23, that Shimizu states that corona discharge is unnecessary.

However, the teaching that corona discharge is unnecessary is not the same as a teaching away from corona discharge.

Applicant also argues, on page 24, that surface treatment is not disclosed by Shimizu.

However, surface treatment is disclosed by WO 97/36798, as stated above.

Applicant also argues, on page 25, that the intensity of corona treatment in the claimed invention is greater than the corona treatment of the prior art.

However, as stated on page 2 of the previous Action, both the claimed film and the prior art film have dyne levels of at least 50 dynes.

Applicant also argues, on page 27, that the claimed invention is against excessive adhesiveness.

However, the lack of excessive adhesiveness is not claimed.

Art Unit: 1794

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.

The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Marc A Patterson/  
Primary Examiner, Art Unit 1794

**Application Number****Application/Control No.**

10/798,462

**Applicant(s)/Patent under  
Reexamination**

SAMUELS, BRIAN R.

**Examiner**

MARC A. PATTERSON

**Art Unit**

1794